AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for providing a dermatological or cosmetic treatment, comprising:

inserting at least a portion of a phototherapy applicator into an oral cavity; and

~~irradiating an area of tissue in the oral cavity in a direction of facial tissue with radiation from the phototherapy applicator~~ irradiating a region of facial tissue below an area of facial skin by directing radiation from the phototherapy applicator to penetrate the mucosal lining of the oral cavity to the region of the facial tissue so as to deposit a dose of radiation below ~~an~~ the area of facial skin, and having at least one wavelength component corresponding to the absorption spectrum of a light acceptor in the oral cavity or in facial tissue,

wherein the ~~area~~ region of tissue is irradiated so as to treat a dermatological or cosmetic condition in said area of the facial ~~tissue~~ skin.

2. (Cancelled).

3. (Cancelled).

4. (Cancelled)

5. (Previously Presented) The method of claim 1, wherein said light acceptor is located within blood flowing in vasculature of at least one of the oral cavity and facial tissue being irradiated.

6. (Previously Presented) The method of claim 1, wherein the step of irradiating further comprises irradiating for a duration in a range of about 10 s to about 1000 s.

7. (Cancelled).

8. (Cancelled).

9. (Previously Presented) The method of claim 1, wherein the light acceptor is at least one light acceptor from the group of porphyrins, cytochromes, molecular oxygen, coproporphyrins, cytochroms, cytogem, cytochromoxidase, cytoporphyrin, protoporphyrin IX, bilirubin, and hair follicles.

10. (Cancelled).

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (Cancelled).

15. (Previously Presented) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 0.38 to about 0.6 microns so as to cause controlled heating of oral cavity tissue at a depth below a mucosal lining.

16. (Previously Presented) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 0.8 microns to about 100 microns so as to cause controlled heating of oral cavity tissue at a depth below a mucosal lining.

17. (Previously Presented) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 0.28 microns to about 1.4 microns.

18. (Previously Presented) A biostimulation method, comprising:

irradiating at least a portion of a subject's oral cavity with radiation having at least one selected wavelength component so as to cause a desired biostimulating effect;

irradiating at least a portion of a subject's oral cavity with radiation having wavelength components within a first bandwidth at a first selected time during the subject's circadian cycle, and

irradiating at least a portion of the subject's oral cavity with radiation having wavelength components within a second bandwidth at a second selected time during the subject's circadian cycle.

19. (Previously Presented) The method of claim 1, further comprising detecting diagnostic signals from said area of tissue to monitor cosmetic or treatment results.

20. (Cancelled).

21. (Cancelled).

22. (Cancelled).

23. (Previously Presented) The method of claim 97, further comprising selecting said radiation to be in a range of about 280 nm to about 1400 nm.

24. (Previously Presented) The method of claim 97, further comprising selecting said radiation to be in a range of about 400 nm to about 650 nm.

25. (Cancelled).

26. (Previously Presented) The method of claim 97, wherein the power is in a range of about 1 mW/cm^2 to about 100 W/cm^2.

27. (Cancelled).

28. (Previously Presented) The method of claim 97, wherein the step of irradiating further comprises sufficiently irradiating to kill pathogens in the blood.

29. (Previously Presented) The method of claim 28, wherein said pathogens are any of bacteria, fungi and viruses.

30. (Previously Presented) The method of claim 97, wherein the radiation corresponds to one or more absorption spectra of one or more light acceptors, and at least one light acceptor is from the group of bilirubin, porphyrins, cytochromes, molecular oxygen, coproporphyrins, cytochroms, cytogem, cytochromoxidase, cytoporphyrin, and protoporphyrin IX.

31. (Cancelled).

32. (Cancelled).

33. (Cancelled).

34. (Cancelled).

35. (Cancelled).

36. (Cancelled).

37. (Cancelled).

38. (Cancelled).

39. (Cancelled).

40. (Cancelled).

41. (Cancelled).

42. (Cancelled).

43. (Cancelled).

44. (Cancelled).

45. (Cancelled).

46. (Cancelled).

47. (Cancelled).

48. (Previously Presented) The method of claim 1, wherein the radiation has a one-day dose of 0.06-30 J/cm^2.

49. (Previously Presented) The method of claim 1, further comprising selecting said wavelength range to be in a range of about 280 nm to about 1.8 microns.

50. (Previously Presented) The method of claim 97, wherein the light acceptor is located within the blood.

51. (Previously Presented) The method of claim 97, wherein the light acceptor is located within pathogens contained within the blood.

52. (Previously Presented) The method of claim 97, wherein the step of irradiating further comprises exposing substantially an entire volume of the subject's blood to said radiation in one treatment session.

53. (Previously Presented) A method of biostimulation via an oral cavity, comprising

irradiating at least a portion of tissue in an oral cavity with electromagnetic radiation having a power density in a range of about 1 W/cm^2 to about 10 W/cm^2 and at least one wavelength corresponding to an absorption band of an endogenous photoreactive substance located in the portion of tissue;

wherein the photoreactive substance absorbs sufficient electromagnetic radiation to cause the selected biostimulation effect.

54. (Previously Presented) The method of claim 53, wherein the step of irradiating further comprises irradiating for a duration in a range of about 10 s to about 1000 s.

55. (Previously Presented) The method of claim 53, wherein the step of irradiating further comprises irradiating with an energy flux in the range of about 1 J/cm^2 to about 1000 J/cm^2.

56. (Previously Presented) The method of claim 53, wherein the step of irradiating further comprises irradiating with an energy flux in the range of about 10 J/cm^2 to about 100 J/cm^2.

57. (Previously Presented) The method of claim 1, wherein the step of irradiating further comprises irradiating for a duration in a range of about 1 s to about one hour.

58. (Previously Presented) The method of claim 1, further comprising preferential deposition of radiation to the facial tissue.

59. (Previously Presented) The method of claim 58, wherein the preferential deposition of radiation comprises depositing the dose of radiation in the direction of the facial tissue.

60. (Previously Presented) The method of claim 1, wherein said treatment comprises any of treating of facial follicles, epidermis, vascular, lump, muscular, subcutaneous fat, collagen, improvement of acne, hair growth control, wrinkle reduction, skin texture improvement, skin tone

improvement, oiliest improvement, skin lifting, lip texture and elasticity improvement, treatment of lips diseases, perioral cheeks and lips vascular improvement and perioral dermatitis treatment.

61. (Previously Presented) The method of claim 1, wherein the power density is in the range of about 1 mW/cm^2 to about 100 W/cm^2.

62. (Previously Presented) The method of claim 1, wherein the power density is in the range of about 1 mW/cm^2 to about 1000 mW/cm^2.

63. (Previously Presented) The method of claim 1, wherein the radiation includes an energy flux in a range of about 1 J/cm^2 to about 1000 J/cm^2.

64. (Previously Presented) The method of claim 1, wherein the radiation includes an energy flux in a range of about 10 J/cm^2 to about 100 J/cm^2.

65. (Previously Presented) The method of claim 1, wherein radiation power delivered is in a range of about 10 mW to about 10 W.

66. (Previously Presented) The method of claim 1, wherein the step of irradiating further comprises irradiating the area of tissue with multiple, distinct wavelength bands.

67. (Previously Presented) The method of claim 66, wherein at least one of the wavelength bands is in a range of about 400 nm to about 430 nm.

68. (Previously Presented) The method of claim 67, wherein another wavelength band is selected from the group consisting of a wavelength of about 630 nm and a wavelength in a range of about 1060 nm to about 1268 nm.

69. (Previously Presented) The method of claim 1, further comprising heating said area of tissue by applying radiation at another wavelength thereto.

70. (Previously Presented) The method of claim 69, wherein said another wavelength is in a range of about 0.38 microns to about 0.6 microns.

71. (Previously Presented) The method of claim 69, wherein said another wavelength is in a range of about 0.8 microns to about 100 microns.

72. (Previously Presented) The method of claim 69, wherein a first radiation source provides the radiation for treating said condition and a second radiation source provides the radiation causing heating of the tissue.

73. (Previously Presented) The method of claim 69, wherein at least one wavelength is within a range of about 400 nm to about 1800 nm.

74. (Previously Presented) The method of claim 53, wherein said biostimulating effect causes any of an increased blood and lymph microcirculation in said irradiated portion, activation of blood microcirculation in tooth pulp and gum, increased local macrophage activity, increased fibroblast, osteoblast and odontoblast proliferation, killing of at least one of bacteria, fungi, and viruses in the oral cavity, normalization of the oral cavity pH, killing of viruses within the subject's blood microcirculatory system, light-induced destruction of selected metabolic blood components, reduction of gum bleeding, reduction of tooth hypersensitivity, pain reduction in teeth and throat, periodontal and bone regeneration, implant, crown and filling connection improvement, reminaralization of enamel, prevention of caries, root canal sterilization, oral inflammation prevention and periodontol disease prevention and healing.

75. (Previously Presented) The method of claim 53, wherein said biostimulating effect includes prevention and improvement in at least one of oral mucus inflammatory disease, tongue disease, recovery from inflammation of salivary glands and small sublingual ducts, and pain reduction in oral tissue, sore throat, angina, acute or chronic tonsillitis, sinusitis recovery, recovery of inflammations of vocal cords and cancer prevention of tissues accessible from the oral cavity.

76. (Previously Presented) The method of claim 53, wherein said irradiating step comprises directing radiation having a selected wavelength band to an area of the subject's oral cavity so as to deposit a dose of radiation below the facial skin to provide a dermatological treatment.

77. (Previously Presented) The method of claim 76, wherein said dermatological treatment comprises any of treating of facial follicles, epidermis, vascular, lump, muscular, subcutaneous fat,

collagen, improvement of acne, hair growth control, wrinkle reduction, skin texture improvement, skin tone improvement, oiliest improvement, skin lifting, lip texture and elasticity improvement, treatment of lips diseases, perioral cheeks and lips vascular improvement and perioral dermatitis treatment.

78. (Currently Amended) A biostimulation method, comprising:

inserting at least a portion of a phototherapy applicator into an oral cavity;

irradiating an area of tissue in the oral cavity with radiation from the phototherapy applicator, the radiation having multiple distinct wavelength bands corresponding to one or more absorption spectra of one or more light acceptors in the oral cavity or in tissue associated with the oral cavity, said one or more light acceptors absorbing at least one radiation wavelength in each of said bands;

wherein at least one of said wavelength bands causes increased microcirculation in the soft tissues of the oral cavity and at least another one of said wavelength bands causes a therapeutic effect, and

wherein the area of tissue is irradiated concurrently with said multiple wavelength bands so as to provide a desired biostimulation.

79. (Previously Presented) The method of claim 78, wherein the irradiation step includes irradiating the tissue with at least one wavelength band which provides heating of the tissue by absorption in water or in blood.

80. (Previously Presented) The method of claim 78, wherein the irradiating step includes irradiating the tissue with at least one wavelength band in a range of about 0.38 microns to about 0.6 microns.

81. (Previously Presented) The method of claim 78, wherein the irradiating step includes irradiating the tissue with at least one wavelength band in a range of about 0.8 microns to about 100 microns.

82. (Previously Presented) The method of claim 78, wherein at least one of said wavelength bands comprises wavelengths in a range of about 280 nm to about 1800 nm.

83. (Previously Presented) The method of claim 78, wherein at least one wavelength band is absorbed by an acceptor which is at least one light acceptor selected from the group consisting of porphyrins, cytochromes, molecular oxygen, coproporphyrins, cytochroms, cytogem, cytochromoxidase, cytoporphyrin, protoporphyrin IX, and bilirubin.

84. (Previously Presented) The method of claim 78, wherein at least one wavelength band is absorbed by hair follicles.

85. (Previously Presented) The method of claim 78, wherein the irradiating step includes at least one wavelength band causing hypothermia in the soft tissues of the oral cavity.

86. (Previously Presented) The method of claim 78, wherein the tissue comprises blood.

87. (Canceled) The method of claim 78, wherein the irradiation step includes at least one wavelength band causing increased microcirculation in the soft tissues of the oral cavity and another wavelength band causing a therapeutic effect.

88. (Previously Presented) The method of claim 78, wherein said biostimulating effect causes any of an increased blood and lymph microcirculation in said irradiated portion, activation of blood microcirculation in tooth pulp and gum, increased local macrophage activity, increased fibroblast, osteoblast and odontoblast proliferation, killing of at least one of bacteria, fungi, and viruses in the oral cavity, normalization of the oral cavity pH, killing of viruses within the subject's blood microcirculatory system, light-induced destruction of selected metabolic blood components, reduction of gum bleeding, reduction of tooth hypersensitivity, pain reduction in teeth and throat, periodontal and bone regeneration, implant, crown and filling connection improvement, reminaralization of enamel, prevention of caries, root canal sterilization, oral inflammation prevention and periodontol disease prevention and healing.

89. (Previously Presented) The method of claim 78, wherein said biostimulating effect includes prevention and improvement in at least one of oral mucus inflammatory disease, tongue disease, recovery from inflammation of salivary glands and small sublingual ducts, and pain reduction in oral tissue, sore throat, angina, acute or chronic tonsillitis, sinusitis recovery, recovery of inflammations of vocal cords and cancer prevention of tissues accessible from the oral cavity.

90. (Previously Presented) The method of claim 78, wherein said irradiating step comprises directing radiation having a selected wavelength band to an area of the subject's oral cavity so as to deposit a dose of radiation below the facial skin to provide a dermatological treatment.

91. (Previously Presented) The method of claim 90, wherein said treatment comprises any of treating of facial follicles, epidermis, vascular, lump, muscular, subcutaneous fat, collagen, improvement of acne, hair growth control, wrinkle reduction, skin texture improvement, skin tone improvement, oiliest improvement, skin lifting, lip texture and elasticity improvement, treatment of lips diseases, perioral cheeks and lips vascular improvement and perioral dermatitis treatment.

92. (Previously Presented) The method of claim 78, wherein the radiation has a power density in a range of about 1 mW/cm^2 to about 100 W/cm^2.

93. (Previously Presented) The method of claim 78, wherein the radiation has a power density in a range of about 10 mW/cm^2 to about 1000 mW/cm^2.

94. (Previously Presented) The method of claim 78, wherein an energy flux is in a range of about 1 J/cm^2 to about 1000 J/cm^2.

95. (Previously Presented) The method of claim 78, wherein an energy flux is in a range of about 10 J/cm^2 to about 100 J/cm^2.

96. (Previously Presented) The method of claim 78, wherein radiation power delivered is in a range of about 10 mW to about 10 W.

97. (Previously Presented) A method of treating a subject's blood, comprising:

exposing at least a portion of a subject's oral cavity to radiation having wavelength components in a range of about 280 nm to about 1800 nm to irradiate blood flowing in vasculature of the oral cavity;

irradiating the oral cavity with said radiation during separate treatment sessions such that a radiation power in a range of about 1 W to about 10 W is administered to the oral cavity during each treatment session; and

irradiating the subject's oral cavity for a sufficiently long time so as to expose substantially an entire volume of the subject's blood to said radiation in one or more treatment sessions.

98. (Previously Presented) The method of claim 97, wherein the power is in a range of about 10 mW/cm^2 to about 1000 mW/cm^2.

99. (Previously Presented) The method of claim 97, wherein energy flux is in a range of about 1 J/cm^2 to about 1000 J/cm^2.

100. (Previously Presented) The method of claim 97, wherein energy flux is in a range of about 10 J/cm^2 to about 100 J/cm^2.

101. (Previously Presented) The method of claim 97, wherein radiation power delivered is in a range of about 10 mW to about 10 W.

102. (Previously Presented) The method of claim 97, wherein the subject's oral cavity is irradiated for up to about one hour in one or more treatment sessions.

103. (Previously Presented) The method of claim 97, wherein the step of irradiating further comprises sufficiently irradiating to improve immunocompetence.

104. (Previously Presented) The method of claim 97, wherein the step of irradiating further comprises sufficiently irradiating to prevent bilirubinenima.

105. (New) A method of treating a subject's blood, comprising:

exposing at least a portion of a subject's oral cavity to radiation having wavelength components in a range of about 280 nm to about 1800 nm and a power in a range of about 1 W to about 10 W to irradiate blood flowing in vasculature of the oral cavity,

irradiating the oral cavity for a sufficient duration to achieve at least one of kill one or more pathogens in the subject's blood, improve immunocompetence of blood macrophages, or destroy a metabolic blood component.

106. (New) The method of claim 105, wherein said one or more pathogens are any of bacteria and viruses.

107. (New) The method of claim 105, wherein said radiation has one or more wavelength components in a range of about 450 nm to about 460 nm.

108. (New) The method of claim 105, wherein said radiation has one or more wavelength components in a range of about 280 nm to about 400 nm.

109. (New) The method of claim 105, wherein said radiation has one or more wavelength components in a range of about 300 nm to about 320 nm.

110. (New) The method of claim 105, wherein said radiation has one or more wavelength components corresponding to absorption bands of Protoporphyrin IX.

111. (New) The method of claim 105, wherein said irradiating step results in deposition of an energy density dose in a range of about 0.06 J/cm^2 to about 30 J/cm^2 in said subject's blood.

112. (New) The method of claim 105, wherein said metabolic component comprises bilirubin.